We claim:

Sub 1

1. A polyether alcohol which can be prepared by ring-opening polymerization of ethylene oxide and at least one alkylene oxide having at least three carbon atoms in the molecule onto H-functional initiator substances, wherein ethylene oxide or a mixture of ethylene oxide and at least one alkylene oxide having at least three carbon atoms in the molecule, where the mixture has an ethylene oxide content of at least 98% by weight, based on the mixture, is added, in each case in an amount of not more than 40% by weight, based on the weight of the polyether alcohol, onto the initiator substance and subsequently at least one alkylene oxide having at least three carbon atoms in the molecule or a mixture of ethylene oxide and at least one alkylene oxide having at least three carbon atoms in the molecule, where the mixture has a maximum ethylene oxide content of 20% by weight, based on the mixture, is added on, and at least one multimetal cyanide compound is used as catalyst.

2. A polyether alcohol as claimed in claim 1, wherein propylene oxide, butylene oxide, isobutylene oxide or any mixtures of at least two of the alkylene oxides mentioned are used as alkylene oxides having at least three carbon atoms in the molecule.

Sub 2

3. A polyether alcohol as claimed in claim 1, wherein propylene oxide is used as alkylene oxide having at least three carbon atoms in the molecule.

4. A polyether alcohol as claimed in claim 1, wherein ethylene oxide is added on at the end of the chain.

5. A polyether alcohol as claimed in claim 4, wherein a maximum of 15% by weight of ethylene oxide, based on the weight of the polyether alcohol, is added on at the end of the chain.

6. A process for preparing polyether alcohols by ring-opening polymerization of ethylene oxide and at least one alkylene oxide having at least three carbon atoms in the molecule onto H-functional initiator substances, which comprises adding ethylene oxide or a mixture of ethylene oxide and at least one alkylene oxide having at least three carbon atoms in the molecule, where the mixture has an ethylene oxide content of at least 98% by weight, based on the mixture, in each case in an amount of not more than 40% by weight, based on the weight

of the polyether alcohol, onto the initiator substance and subsequently adding on at least one alkylene oxide having at least 3 carbon atoms in the molecule or a mixture of ethylene oxide and at least one alkylene oxide having at least 3 carbon atoms in the molecule, where the mixture has a maximum ethylene oxide content of 20% by weight, based on the mixture, and at least one multimetal cyanide compound is used as catalyst.

7. A process as claimed in claim 6, wherein at least one basic compound is used as catalyst for the addition of the ethylene oxide or of the mixture of ethylene oxide and at least one alkylene oxide having at least 3 carbon atoms in the molecule, where the mixture has an ethylene oxide content of at least 98% by weight, based on the mixture, onto the initiator substance, and at least one multimetal cyanide compound is used as catalyst for adding on the alkylene oxide or oxides having at least 3 carbon atoms in the molecule or the mixture of ethylene oxide and at least one alkylene oxide having at least 3 carbon atoms in the molecule, where the mixture has a maximum ethylene oxide content of 20% by weight, based on the mixture.

Sub A2

8. A process for preparing polyether alcohols as claimed in claim 4, wherein at least one basic compound is used as catalyst for the addition of the ethylene oxide or of the mixture of ethylene oxide and at least one alkylene oxide having at least 3 carbon atoms in the molecule, where the mixture has an ethylene oxide content of at least 98% by weight, based on the mixture, onto the initiator substance and at least one multimetal cyanide compound is used as catalyst for adding on the alkylene oxide or oxides having at least 3 carbon atoms in the molecule or the mixture of ethylene oxide and at least one alkylene oxide having at least 3 carbon atoms in the molecule, where the mixture has a maximum ethylene oxide content of 20% by weight, based on the mixture, and at least one basic compound is used as catalyst for adding on the ethylene oxide at the end of the chain.

9. A polyurethane which can be produced by reacting polyisocyanates with compounds having at least two hydrogen atoms which are reactive toward isocyanate groups, wherein a polyether alcohol as claimed in any of claims 1 to 5 is used as compound having at least two hydrogen atoms which are reactive toward isocyanate groups.

Add A3